Searching PAJ Page 1 of 1

## PATENT ABSTRACTS OF JAPAN

(11)Publication number: 2001-081103 (43)Date of publication of application: 27.03.2001

(51)Int.Cl. C08B 37/08

A61K 38/21 A61P 1/16 A61P 31/12

(21)Application number: 11-258941 (71)Applicant: DENKI KAGAKU KOGYO KK

(22)Date of filing: 13.09.1999 (72)Inventor: IKETANI HITOSHI

ARAI KAZUHIKO
TAKAHASHI KOICHI
HIMEDA KOICHI
HIRAMATSU YUTAKA
MARUYAMA ATSUSHI
AKAIKE TOSHIHIRO

## (54) HYALURONIC ACID-BOUND MEDICINAL AGENT

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain the subject medicinal agent turnable to the liver after administered, improved in its therapeutic effect, capable of reducing its side effects, safe without toxicity and antigenicity, and useful for the therapy and prophylactic of such liver diseases as hepatitis and hepatocirrhosis.

SOLUTION: This medicinal agent is a binding reaction product between (A) hyaluronic acid with a molecular weight of preferably 2,000-9,000 and (B) a medicinal agent with amino group (preferably such an antiviral agent as interferon). It is preferable that at least one molecule of the component A is bound to one molecule of the component B. The binding reaction between the components A and B is done by using e.g. a boric acid buffer solution as a reaction solvent preferably under the condition of a reaction temperature of  $0-50^{\circ}$  C, reaction pH of 5-9 and reaction time of 5-7 day.